**JavaScript in the Browser: DOM Manipulation and Events**

**DOM:**

Document Object Model

Structured representation of an HTML document that can be used to connect webpages to scripts or programming languages such as JavaScript

For each HTML box, there is an object in the DOM that we can access and interact with right from the JavaScript code.

DOM

JavaScript

Interaction/ Manipulation

A Html is the document that holds the content of webpage.

CSS is the presentation in which we simply write rules to style our webpage

In html we have elements which are composed of entry tags, contents and closing tags in most of the cases.

A class attribute allows us to give a name and id’s also allows giving name but difference is an id has to be unique and a class name can be used over and over again throughout the pages.

Structure of HTML is divided into 2parts which are header (contains additional info about the webpage such as title) and body (it contains the visible content of a webpage)

**Events:**

Notifications that are sent to notify the code that something has happened on the webpage

Events are trigger by clicking a button, scrolling down etc…

We can use event listeners to code responses to these events.

Event Listener is a function that performs an action based on a certain event. It waits for a specific event to happen

How events are processed?

It’s a rule that an event can only be processed or handled as soon as the execution stack is empty.

There is a message queue present in JS engine where all the events that happens in the browser are put and waits for being processed

Even the event listener has its own execution context which is put at the top of execution stack and becomes the act of execution context as it is also a function.

A callback function is a function which is called by another function and not by us or a function that we pass as an argument to another function.

An anonymous function is a function which doesn’t have a name and can’t be reused.

DOM object can be accessed using document.function\_name();

document.querySelector().textContent() : for setting a text value to a id(#) or a class(.)[in css style]

document.querySelector().innerHTML() : for setting a text using html tag to a id(#) or a class(.)[in css style]

document.getElementById().innerHTML() : for setting a text using html tag to a id